

ABSTRACT

“A MICRO-ADJUSTABLE TOOL CHUCK”

A micro-adjustable tool chuck comprises a first cylindrical body member
5 (1) adapted for connection to a drive spindle, a second cylindrical body member
(2) adapted to receive a tool bit in the end thereof, and moveable axially relative to
the first body member (1), and means for drivingly connecting the first body
member (1) to the second body member (2). A first screw thread (10) is formed
10 on the outer surface of the first body member (1) and a second screw thread (11) is
formed on the outer surface of the second body member (2). The first screw
thread (10) is of a greater pitch (coarser) than the second screw thread (11). An
outer sleeve (12) is provided around the first and second body members (1,2),
which outer sleeve (12) defines a third screw thread (13) on the inner surface
thereof at one end which engages with the said first screw thread (10) on the first
15 body member (1) and a fourth screw thread (14) on the inner surface thereof at the
opposite end which engages with the second screw thread (11) on the second body
member (2) such that rotation of the outer sleeve (12) in one direction causes the
first and second body members (1,2) to move axially towards each other and
rotation of the outer sleeve (12) in the opposite direction causes the first and
20 second body members (1,2) to move axially away from each other.

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